



Department of Computer Applications National Institute of Technology, Tiruchirappalli

Course Outline			
Name of the programme and specialization	M. C.A.		
Course Title	Information Security Lab		
Course Code	CA708	No. of Credits	2
Course Code of Pre-requisite subjects	CA 715, CA 712, CA 714		
Session	January 2019	Section	A and B
Course Type	Laboratory	Department	Computer Applications
Faculty Name	Dr. Mrs. B. Janet	Office	Lyceum 108
E-mail	janet@nitt.edu	Telephone No.	0431-2503741
Course Page	http://moodle.nitt.edu/moodle/course/view.php?id=7		

Course Syllabus
<p>The Information Security Lab deals with the study and analysis of security in computers. It also explores Physical security, Cryptography, Forensics, Network, Application and Data security problems.</p> <p>Exercises to learn information security related programming and hacking will be given.</p>
Course Objectives
<ol style="list-style-type: none"> 1. To experiment the models of information security 2. To study and analyze cryptographic and forensic methods 3. Analyze and simulate the network security and application security 4. Explore the nature and logic behind security threats on the web as an ethical hacker
Course Outcomes (CO)
<ol style="list-style-type: none"> 1. Identify the information security models and their characteristics 2. Analyze the different types of cryptographic and forensic methods 3. Study the network security issues 4. Study the application security problems and apply the fixes 5. Identify different threats using tools and suggest fixes for security issues.

Course Outcome (CO)	Aligned Programme Outcome (PO)
Identify information security models and their characteristics	1,2,6,7,10,11
Analyze the different types of cryptographic and forensic methods	1,2,5,7,12
Study the network security issues	1,2,3,5,7,10,11,12
Study the application security problems and apply the fixes	1,2,3,4,5,7,10,11,12
Identify different threats using tools and suggest fixes for security issues.	1,2,3,4,5,6,7,8,10,11,12

Exercise

The Moodle **Course Page** will be available for detailed lab exercise dissemination and discussion inside and outside the Laboratory, between students and with the teacher.

Lab Exercise		
Week	Topic	Exercise
1	Physical security	Described in Moodle Course Page
2	Access security	
3	SDLC Security	
4	Cryptography	
5	OS Security	
6	Steganography and Biometrics	
7	Network security	
8	Application Security	
9	Security Tools	
10	Web Application Exploits	

The assessment details for this course are given below. The assessment will be done for a total of 100 marks.

Course Assessment Methods – Theory					
Sl. No.	Mode of Assessment	Nature	Tentative Schedule	Duration in Min.	Weightage (%)
1.	Test	Formative	4 th week	60	10
2.	Test	Formative	8 th week	60	15
3.	Lab activity	Periodic	Lab duration	NA	50
4.	End Semester Exam	Summative	11 th week	120	25
Total					100

Lab Survey

- The students may give their feedback at any time to the course Teacher or through an email message in moodle, which will be duly addressed.
- The students may also give their feedback during Class Committee meeting and fill up the feedback form in moodle site at the end of each test.

Course Policy

Lab Behavior

- Ensure that the course atmosphere, both in the Lab and discussions outside the Lab with Teacher, is conducive for learning. Participate in discussions but do not dominate or be abusive. Be considerate of your fellow students and avoid disruptive behavior.

Exam policy

- Each student is required to take all exams at the scheduled times. All exceptions must be cleared with the professor prior to the exam time. Exams missed for insufficient reason and without being cleared with the professor prior to the exam time will be assigned a score of zero.
- Passing Minimum is 40%.

Assignments

- All assignments are due on or before the mentioned date and time and is to be uploaded on the Lab moodle site.

Plagiarism

The students are expected to come out with their original work on activity, assignments and tests/examinations. If found to be plagiarized, it will be assigned a score of zero.

Attendance

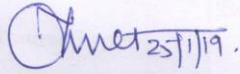
- i) At least 75% attendance in each course is mandatory.
- ii) A maximum of 10% shall be allowed under On Duty (OD) category.

- iii) Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.

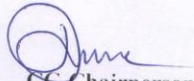
Academic dishonesty & plagiarism

- i) Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- ii) Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.
- iii) The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.

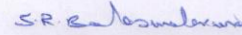
FOR APPROVAL



Course Faculty
(Dr. Mrs. B. Janet)



CC Chairperson
(Dr. S. Dominic)



HOD
(Dr. S. R. Balasundaram)